Spruce Beetle and Sudden Aspen Decline Management Response

Basic Science and Analysis Assumptions: Range

Guiding Issues and Goals

The objectives of this project related to management of range and grazing allotments includes the following: 1) Protect Range improvements, 2) Eliminate conflicts between implementation activities and range activities, or mitigate for conflicts, 3) Revegetate sites disturbed during implementation.

Overarching Assumptions

Through implementation and use of project design features, effects of proposed actions would be minimized. Design features would be implemented to protect vegetation (forage), reduce risk of invasive plant introduction or expansion, protect range improvements and maintain forage production. Related project design features¹ include:

- All range improvements including: fences, cattle guards, corrals, water developments, pipelines, troughs, stock trails and stock driveways will be identified in the timber sale or service contract with a protect improvements clause.
- Range transects and witness trees/posts (survey monuments) will be identified in the timber sale or service contract map and protected with a contract clause.
- Coordinate with District Rangeland Management Specialists when developing the sale and/or service contract to identify and mitigate any potential conflicts during implementation. Range personnel would be responsible for incorporating mitigation measures into grazing permittees' Annual Operating Instructions (plan) (for example, a pasture may need to be grazed earlier or later to avoid conflict with timber sale activities, or with prescribed burn plans or to avoid a stock driveway at a particular time of year, etc.).
- Proven best management practices will be used to minimize impacts (FS National Core BMP's April 2012, Part 3. National Core BMP's, Rangeland Management Activities).
- Retain native vegetation to the extent possible to prevent invasive weed spreading and establishing in and around activity area. Keep soil disturbance to a minimum.
 - A. Timber purchasers and contractors will re-seed disturbed areas with a Forest approved certified weed-free native seed mix (USDA Forest Service 2008) to avoid introducing nonnative invasive plants and to promote re-vegetation of native species.

¹ See 2014_05_08_GMUM_SBEADMR_Appendix_F_Design_Features_version_1.doc for references associated with the project design features.

- B. Throughout the implementation period of the proposed action, the Forest Service should maintain flexibility to defer treatment in cutting units or stands in priority areas if new significant invasive plant populations with potential to disrupt the functioning of native plant communities are found.
- C. Where fuel reduction, timber harvest and other resource objectives necessitate ground disturbance and soil exposure, or substantial ground cover and canopy removal, include appropriate re-vegetation or invasive plant management strategies in the fuel treatment plan. (Where necessary, rehabilitate/restore or treat disturbed areas after management activities and conduct follow up monitoring on areas susceptible to invasive plant spread.)
- D. Rehabilitate/restore or treat disturbed areas after fuel management activities and conduct follow up monitoring on areas susceptible to invasive plant spread.
- E. Cover to reduce exposure of bare ground. Use on-site chipping or treated fuels from mastication to cover bare soil to prevent seed establishment where appropriate. (See design feature SV-4 concerning areas where mineral soil exposure would be needed to assist with natural regeneration.)
- F. Slash and burn piles will be located away from known invasive plant populations and will be assessed for restoration and revegetation needs.
- Design project to avoid introducing new weeds or spread of existing infestations
 - A. Any weed infestations will be treated prior to implementation as part of the project activities
 - B. Consider excluding areas from prescribed burning where there are fire-proliferating species infestations (example, cheatgrass).
- Identify what weed species are on site, or within reasonably expected potential invasion vicinity, assess risks and modify activities as needed.
 - A. Inventory non-native invasive plant populations within and adjacent to treatment areas and access roads prior to vegetation treatment. Inventories will occur during the proper time of year for detection, and will be completed in sufficient time to conduct necessary pre implementation treatments
- Before ground-disturbing activities begin, inventory and prioritize weed infested areas for treatment in project operating areas and along access routes. Control invasive weeds where needed:
 - A. Annually, vegetation management personnel would collaborate on project layout and design. During layout of commercial and non-commercial mechanical treatment or prescribed burn units, forest vegetation management personnel would evaluate invasive risks, analyze potential treatment areas for invasive weeds within high risk sites to identify prevention practices and minimize weed establishment and spread

Methods - Analysis Approach

The following documents were reviewed to ensure project compliance with Forest Plan, laws, regulations and policies:

- GMUG 1983 Forest Plan standards and guides, updates and amendments related to range management.
- FS Handbook 2200 Range Management (2209.14)
- FS Manual 2200 Range Management
- FS National Core BMP's April 2012, Part 3. National Core BMP's, Rangeland Management Activities. Page 81-86.

A rangeland/grazing specialist report will not be completed for this project. Proposed activity effects on vegetation would be analyzed and discussed for proposed alternatives in the EIS

Expected Outcomes / Results

Forest Plan standards and guides, along with FS Handbook, FS Manual, and BMP direction would be included in project design and adhered to in implementation. By implementing design features, specifically range and invasive weeds design features, potential effects to the range/grazing would be low. Range improvements would be protected, existing invasive plants and future infestations would be controlled, and areas where the soil is exposed would be seeded creating little adverse impacts to the range resource. Proposed treatments creating a more open tree cover could increase grasses creating increased available forage for grazing.